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703 836 2021 P.02

Patent
Attorney's Docket No. 027650-968

AMENDMENTS PER TELEPHONE CONFERENCE OF SEPT. 30, 2005

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method of producing a laminated packaging material for liquid food packaging comprising a core layer of paper or paperboard and a gas barrier layer applied on one side of the core layer, wherein a liquid barrier composition including a dispersion or solution of a polymer is applied as the barrier layer on at least a first side of a carrier layer and is dried during heating for driving off liquid at a first drying temperature in a first step, and that a second side of the carrier layer is combined and permanently united with one side of the core layer in a second step, whereafter the dried barrier layer is cured by heating to above a second temperature being higher than the first temperature, in a third step, and wherein outer layers of thermoplastics, are applied on the barrier layer and the core layer by means of extrusion in a fourth step, and wherein the steps occur sequentially.

2. (Previously Presented) The method as claimed in Claim 1, wherein the carrier layer bearing at least one dried barrier layer is combined and united with the core layer by extrusion of a layer of thermoplastics therebetween.

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3. (Previously Presented) The method as claimed in Claim 1, wherein said barrier layer is applied on the carrier layer by means of liquid film coating with said liquid barrier composition.

4. (Previously Presented) The method as claimed in Claim 1, wherein said liquid barrier composition applied as a barrier layer includes a polymer with functional hydroxyl groups.

5. (Previously Presented) The method as claimed in Claim 4, wherein said polymer with functional hydroxyl groups is selected from the group consisting of polyvinyl alcohol, ethylene vinyl alcohol, starch, starch derivatives, carboxyl methyl cellulose and other cellulosic derivatives, and a mixture of two or more thereof.

6. (Previously Presented) The method as claimed in Claim 1, wherein said liquid barrier composition applied as the barrier layer is dried at a web surface temperature of approx. 80 to 160°C.

7. (Previously Presented) The method as claimed in Claim 1, wherein said liquid barrier composition applied as the barrier layer also includes a polymer with functional carboxylic acid groups.

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8. (Previously Presented) The method as claimed in Claim 7, wherein said polymer with functional carboxylic acid groups is selected from the group consisting of ethylene acrylic acid copolymer and ethylene metacrylic acid copolymer and mixtures thereof.

9. (Previously Presented) The method as claimed in Claim 8, wherein said barrier layer is a mixture of polyvinyl alcohol and ethylene acrylic acid copolymer.

10. (Previously Presented) The method as claimed in Claim 8, wherein said barrier layer is a mixture of polyvinyl alcohol, ethylene acrylic acid copolymer and an inorganic laminar compound.

11. (Previously Presented) The method as claimed in Claim 7, wherein the dried barrier layer is cured at a temperature of up to 200°C.

12. (Previously Presented) The method as claimed in Claim 1, wherein said barrier layer is applied on the carrier layer in an amount of approx. 1-10 g/m², based on dry coating weight.

13. (Previously Presented) The method as claimed in Claim 1, wherein said carrier layer consists of thin paper optionally coated with a layer of plastic or of a plastics film.

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14. (Previously Presented) The method as claimed in Claim 1, wherein said carrier layer consists of paper with a grammage of approx. 5-35 g/m².

15. (Cancelled)

16. (Previously Presented) The method as claimed in Claim 2, wherein the layer of plastic applied between the core layer and the carrier layer includes a substance functioning as light barrier.

17. (Cancelled)

18. (Cancelled)

19. (Previously Presented) The method as claimed in Claim 11, wherein the dried barrier layer is cured at a temperature of approx. 170 to 190°C.

20. (Previously Presented) The method as claimed in Claim 15, wherein the outer layers of thermoplastics include polyethylene.

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21. (Currently Amended) A method of producing a laminated packaging material for liquid food packaging comprising a core layer of paper or paperboard and a gas barrier layer applied on one side of the core layer, the method comprising the following steps in order:

applying a liquid barrier composition including a dispersion or solution of a polymer as a barrier layer on at least one a first side of a carrier layer, wherein applying occurs in a barrier layer and carrier layer production line;

driving off liquid from said barrier layer by heating to a first temperature to produce a dried barrier layer on the carrier layer, wherein driving off liquid occurs in the barrier layer and carrier layer production line;

winding the dried barrier layer on the carrier layer on a roll;

unwinding the roll and introducing said dried barrier layer on the carrier layer into a lamination processing line;

combining and permanently uniting a second side of the dried barrier layer on the carrier layer with one side of a core layer by extrusion of a layer of thermoplastics therebetween, wherein combining and permanently uniting occurs in the lamination processing line;

curing the dried barrier layer to form an intermediate web by heating to above a second temperature, wherein the second temperature is greater than the first temperature and curing occurs in the lamination processing line; and

applying a first outer layer to a first side of the intermediate web and applying a second outer layer to a second side of the intermediate web, therein both the

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first layer and the second layer are thermoplastics and the first layer and the second layer are applied by extrusion.

22. (Previously Presented) The method of Claim 21, wherein the carrier layer is heat sensitive at temperatures above the second temperature.

23. (Canceled)